

Project 25 Compliance Assessment Program  
Summary Test Report  
EF Johnson Viking VP900 UHF and 700/800 MHz Portable Subscriber Unit  
STR-EFJ-16022601  
February 26, 2016

Test Item Description	
<b>Manufacturer</b>	EF Johnson Technologies
<b>Manufacturer Contact</b>	John Oblak (507) 382-6327
<b>Product Name</b>	Viking VP900 UHF (470 MHz to 512 MHz) and 700/800 MHz Portable Subscriber Unit
<b>Installed Options</b>	Limited and Full Keypad, SEM Installed
<b>Vocoder Identification</b>	Enhanced Full Rate

Test Description
P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance
P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance
P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability

Test Information	
<b>P25 CAP Laboratory Code</b>	P25CAP081010 (EF Johnson Technologies)
<b>Date(s) of Test</b>	January 22, 2016 to February 24, 2016
<b>Date of Issue</b>	February 26, 2016

Test Information	
<b>P25 CAP Laboratory Code</b>	P25CAP081010 (EF Johnson Technologies)
<b>Date(s) of Test</b>	February 11, 2016 to February 24, 2016
<b>Date of Issue</b>	February 26, 2016

Test Information	
<b>P25 CAP Laboratory Code</b>	P25CAP081010 (EF Johnson Technologies)
<b>Date(s) of Test</b>	October 5, 2012
<b>Date of Issue</b>	October 8, 2012

Test Information	
<b>P25 CAP Laboratory Code</b>	P25CAP081016 (Timco Engineering)
<b>Date(s) of Test</b>	July 24, 2012
<b>Date of Issue</b>	July 31, 2012

Project 25 Compliance Assessment Program  
Summary Test Report  
EF Johnson Viking VP900 UHF and 700/800 MHz Portable Subscriber Unit  
STR-EFJ-16022601  
February 26, 2016

Test Information	
<b>P25 CAP Laboratory Code</b>	P25CAP081017 (Harris)
<b>Date(s) of Test</b>	December 11, 2012
<b>Date of Issue</b>	December 17, 2012

Test Information	
<b>P25 CAP Laboratory Code</b>	P25CAP081010 (EF Johnson Technologies)
<b>Date(s) of Test</b>	January 28, 2013
<b>Date of Issue</b>	February 4, 2013

Test Information	
<b>P25 CAP Laboratory Code</b>	P25CAP081010 (EF Johnson Technologies)
<b>Date(s) of Test</b>	June 5, 2014 to June 6, 2014
<b>Date of Issue</b>	July 3, 2014

Informative References	
Date	Title
Mar 2010	P25-CAB-CAI_TEST_REQ – March 2010

Other Devices Tested with Viking VP600 Portable Subscriber Unit		
Manufacturer	Product Name, Definition, and Unique ID	Installed Options
Tait	TN9400 TaitNet P25	Firmware 3.70, Kernel 3.60
EF Johnson	IP25 Trunked Infrastructure	Release 3.1-RC1
Harris	P25 Trunked Infrastructure	Release PR9D
EF Johnson	Atlas Trunked Infrastructure	TSNI 1.0.5-1
Motorola Solutions	ASTRO Trunked Infrastructure	Release 25.7.14

Project 25 Compliance Assessment Program  
Summary Test Report  
EF Johnson Viking VP900 UHF and 700/800 MHz Portable Subscriber Unit  
STR-EFJ-16022601  
February 26, 2016

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance		DTR-P25CAP081010-16022601	
Receiver Tests (700/800 MHz)			
Test Case	Description	Requirement	Results
2.1.4	Reference Sensitivity	≤ -116 dBm (Class A	P1
2.1.5	Faded Reference Sensitivity	≤ -108 dBm (Class A)	P2
2.1.6	Signal Delay Spread Capability	≥ 50 μs	P3
2.1.7	Adjacent Channel Rejection	≥ 60 dB (Class A)	P4
2.1.8	Co-Channel Rejection	≤ 9 dB	P
2.1.9	Spurious Response Rejection	≥ 70 dB (Class A)	P
2.1.10	Intermodulation Rejection	≥ 70 dB (Class A)	P
2.1.11	Signal Displacement Bandwidth	≥ 1000 Hz	P
2.1.17	Late Entry Unsquelch Delay		
	No Talk Group or Encryption	≤ 125 ms	P
	Talk Group Only	≤ 370 ms	P
	Encryption Only	≤ 370 ms	P
	Both Talk Group and Encryption	≤ 460 ms	P
2.1.18	Receiver Throughput Delay	≤ 125 ms	P

Project 25 Compliance Assessment Program  
Summary Test Report  
EF Johnson Viking VP900 UHF and 700/800 MHz Portable Subscriber Unit  
STR-EFJ-16022601  
February 26, 2016

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance		DTR-P25CAP081010-16022601	
Receiver Tests (UHF)			
Test Case	Description	Requirement	Results
2.1.4	Reference Sensitivity	≤ -116 dBm (Class A	P5
2.1.5	Faded Reference Sensitivity	≤ -108 dBm (Class A)	P6
2.1.6	Signal Delay Spread Capability	≥ 50 μs	P7
2.1.7	Adjacent Channel Rejection	≥ 60 dB (Class A)	P8
2.1.8	Co-Channel Rejection	≤ 9 dB	P
2.1.9	Spurious Response Rejection	≥ 70 dB (Class A)	P
2.1.10	Intermodulation Rejection	≥ 70 dB (Class A)	P
2.1.11	Signal Displacement Bandwidth	≥ 1000 Hz	P
2.1.17	Late Entry Unsquelch Delay		
	No Talk Group or Encryption	≤ 125 ms	P
	Talk Group Only	≤ 370 ms	P
	Encryption Only	≤ 370 ms	P
	Both Talk Group and Encryption	≤ 460 ms	P
2.1.18	Receiver Throughput Delay	≤ 125 ms	P

Project 25 Compliance Assessment Program  
Summary Test Report  
EF Johnson Viking VP900 UHF and 700/800 MHz Portable Subscriber Unit  
STR-EFJ-16022601  
February 26, 2016

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance		DTR-P25CAP081010-16022601	
Transmitter Tests (800 MHz)			
Test Case	Description	Requirement	Results
2.2.8	Unwanted Emissions: Adjacent Channel Power Ratio	≥ 67 dB	P
2.2.12	Transmitter Power and Encoder Attack Time		
	Power Attack Time	≤ 50 ms	P
	Encoder Attack Time	≤ 100 ms	P
2.2.14	Transmitter Throughput Delay	≤ 125 ms	P
2.2.15	Frequency Deviation for C4FM		
	High Level Signal Deviation	2544 Hz < f <sub>dev</sub> ≤ 3111 Hz	P
	Low Level Signal Deviation	848 Hz < f <sub>dev</sub> ≤ 1037 Hz	P
2.2.16	Modulation Fidelity	≤ 5% (Class A)	P
2.2.18	Transient Frequency Behavior		
	Time Interval t <sub>1</sub> = 20 ms	Δf  ≤ 12.5 kHz	P
	Time Interval t <sub>2</sub> = 50 ms	Δf  ≤ 6.25 kHz	P
	Time Interval t <sub>3</sub> = 10 ms	Δf  ≤ 12.5 kHz	P

Project 25 Compliance Assessment Program  
Summary Test Report  
EF Johnson Viking VP900 UHF and 700/800 MHz Portable Subscriber Unit  
STR-EFJ-16022601  
February 26, 2016

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance		DTR-P25CAP081010-16022601	
Transmitter Tests (700 MHz)			
Test Case	Description	Requirement	Results
2.2.8	Unwanted Emissions: Adjacent Channel Power Ratio		
	Offset From Center Frequency (kHz)		
	9.375	≥ 40 dB	P
	15.625, 21.875, 37.5	≥ 60 dB	P
	62.5, 87.5, 150, 250, 350	≥ 65 dB	P
	>400 kHz to 12 MHz	≥ 75 dB	P
	12 MHz to paired RX Band	≥ 75 dB	P
	In the paired RX Band	≥ 100 dB	P
2.2.12	Transmitter Power and Encoder Attack Time		
	Power Attack Time	≤ 50 ms	P
	Encoder Attack Time	≤ 100 ms	P
2.2.14	Transmitter Throughput Delay	≤ 125 ms	P
2.2.15	Frequency Deviation for C4FM		
	High Level Signal Deviation	2544 Hz < f <sub>dev</sub> ≤ 3111 Hz	P
	Low Level Signal Deviation	848 Hz < f <sub>dev</sub> ≤ 1037 Hz	P
2.2.16	Modulation Fidelity	≤ 5% (Class A)	P
2.2.18	Transient Frequency Behavior		
	Time Interval t <sub>1</sub> = 20 ms	Δf  ≤ 12.5 kHz	P
	Time Interval t <sub>2</sub> = 50 ms	Δf  ≤ 6.25 kHz	P
	Time Interval t <sub>3</sub> = 10 ms	Δf  ≤ 12.5 kHz	P

Project 25 Compliance Assessment Program  
Summary Test Report  
EF Johnson Viking VP900 UHF and 700/800 MHz Portable Subscriber Unit  
STR-EFJ-16022601  
February 26, 2016

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.1 – Project 25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance		DTR-P25CAP081010-16022601	
Transmitter Tests (UHF)			
Test Case	Description	Requirement	Results
2.2.8	Unwanted Emissions: Adjacent Channel Power Ratio	≥ 67 dB	P
2.2.12	Transmitter Power and Encoder Attack Time		
	Power Attack Time	≤ 50 ms	P
	Encoder Attack Time	≤ 100 ms	P
2.2.14	Transmitter Throughput Delay	≤ 125 ms	P
2.2.15	Frequency Deviation for C4FM		
	High Level Signal Deviation	2544 Hz < f <sub>dev</sub> ≤ 3111 Hz	P
	Low Level Signal Deviation	848 Hz < f <sub>dev</sub> ≤ 1037 Hz	P
2.2.16	Modulation Fidelity	≤ 5% (Class A)	P
2.2.18	Transient Frequency Behavior		
	Time Interval t <sub>1</sub> = 10 ms	Δf  ≤ 12.5 kHz	P
	Time Interval t <sub>2</sub> = 25 ms	Δf  ≤ 6.25 kHz	P
	Time Interval t <sub>3</sub> = 10 ms	Δf  ≤ 12.5 kHz	P

Project 25 Compliance Assessment Program  
Summary Test Report  
EF Johnson Viking VP900 UHF and 700/800 MHz Portable Subscriber Unit  
STR-EFJ-16022601  
February 26, 2016

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-16022601 DTR-P25CAP081010-16022602	
Receiver Tests (700/800 MHz)			
Test Case	Description	Requirement	Results
2.1.4	Reference Sensitivity	≤ -116 dBm (Class A)	P1
2.1.5	Faded Reference Sensitivity	≤ -108 dBm (Class A)	P2
2.1.6	Signal Delay Spread Capability	≥ 50 μs	P3
2.1.7	Adjacent Channel Rejection	≥ 60 dB (Class A)	P4
2.1.8	Co-Channel Rejection	≤ 9 dB	P
2.1.9	Spurious Response Rejection	≥ 70 dB (Class A)	P
2.1.10	Intermodulation Rejection	≥ 70 dB (Class A)	P
2.1.11	Signal Displacement Bandwidth	≥ 1000 Hz	P



Project 25 Compliance Assessment Program  
Summary Test Report  
EF Johnson Viking VP900 UHF and 700/800 MHz Portable Subscriber Unit  
STR-EFJ-16022601  
February 26, 2016

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-16022601 DTR-P25CAP081010-16022602	
Receiver Tests (UHF)			
Test Case	Description	Requirement	Results
2.1.4	Reference Sensitivity	≤ -116 dBm (Class A)	P5
2.1.5	Faded Reference Sensitivity	≤ -108 dBm (Class A)	P6
2.1.6	Signal Delay Spread Capability	≥ 50 μs	P7
2.1.7	Adjacent Channel Rejection	≥ 60 dB (Class A)	P8
2.1.8	Co-Channel Rejection	≤ 9 dB	P
2.1.9	Spurious Response Rejection	≥ 70 dB (Class A)	P
2.1.10	Intermodulation Rejection	≥ 70 dB (Class A)	P
2.1.11	Signal Displacement Bandwidth	≥ 1000 Hz	P

Project 25 Compliance Assessment Program  
Summary Test Report  
EF Johnson Viking VP900 UHF and 700/800 MHz Portable Subscriber Unit  
STR-EFJ-16022601  
February 26, 2016

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-16022601 DTR-P25CAP081010-16022602	
Transmitter Tests (800 MHz)			
Test Case	Description	Requirement	Results
2.2.8	Unwanted Emissions: Adjacent Channel Power Ratio	≥ 67 dB	P
2.2.12	Transmitter Power and Encoder Attack Time		
	Power Attack Time	≤ 50 ms	P
	Encoder Attack Time	≤ 100 ms	P
2.2.14	Transmitter Throughput Delay	≤ 125 ms	P
2.2.15	Frequency Deviation for C4FM		
	High Level Signal Deviation	2544 Hz < f <sub>dev</sub> ≤ 3111 Hz	P
	Low Level Signal Deviation	848 Hz < f <sub>dev</sub> ≤ 1037 Hz	P
2.2.16	Modulation Fidelity	≤ 5% (Class A)	P
2.2.18	Transient Frequency Behavior		
	Time Interval t <sub>1</sub> = 20 ms	Δf  ≤ 12.5 kHz	P
	Time Interval t <sub>2</sub> = 50 ms	Δf  ≤ 6.25 kHz	P
	Time Interval t <sub>3</sub> = 10 ms	Δf  ≤ 12.5 kHz	P

Project 25 Compliance Assessment Program  
Summary Test Report  
EF Johnson Viking VP900 UHF and 700/800 MHz Portable Subscriber Unit  
STR-EFJ-16022601  
February 26, 2016

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-16022601 DTR-P25CAP081010-16022602	
Transmitter Tests (700 MHz)			
Test Case	Description	Requirement	Results
2.2.8	Unwanted Emissions: Adjacent Channel Power Ratio		
	Offset From Center Frequency (kHz)		
	9.375	≥ 40 dB	P
	15.625, 21.875, 37.5	≥ 60 dB	P
	62.5, 87.5, 150, 250, 350	≥ 65 dB	P
	>400 kHz to 12 MHz	≥ 75 dB	P
	12 MHz to Paired RX Band	≥ 75 dB	P
	In the Paired RX Band	≥ 100 dB	P
2.2.12	Transmitter Power and Encoder Attack Time		
	Power Attack Time	≤ 50 ms	P
	Encoder Attack Time	≤ 100 ms	P
2.2.14	Transmitter Throughput Delay	≤ 125 ms	P
2.2.15	Frequency Deviation for C4FM		
	High Level Signal Deviation	2544 Hz < f <sub>dev</sub> ≤ 3111 Hz	P
	Low Level Signal Deviation	848 Hz < f <sub>dev</sub> ≤ 1037 Hz	P
2.2.16	Modulation Fidelity	≤ 5% (Class A)	P
2.2.18	Transient Frequency Behavior		
	Time Interval t <sub>1</sub> = 20 ms	Δf  ≤ 12.5 kHz	P
	Time Interval t <sub>2</sub> = 50 ms	Δf  ≤ 6.25 kHz	P
	Time Interval t <sub>3</sub> = 10 ms	Δf  ≤ 12.5 kHz	P

Project 25 Compliance Assessment Program  
Summary Test Report  
EF Johnson Viking VP900 UHF and 700/800 MHz Portable Subscriber Unit  
STR-EFJ-16022601  
February 26, 2016

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-16022601 DTR-P25CAP081010-16022601	
Transmitter Tests (UHF)			
Test Case	Description	Requirement	Results
2.2.8	Unwanted Emissions: Adjacent Channel Power Ratio	≥ 67 dB	P
2.2.12	Transmitter Power and Encoder Attack Time		
	Power Attack Time	≤ 50 ms	P
	Encoder Attack Time	≤ 100 ms	P
2.2.14	Transmitter Throughput Delay	≤ 125 ms	P
2.2.15	Frequency Deviation for C4FM		
	High Level Signal Deviation	2544 Hz < f <sub>dev</sub> ≤ 3111 Hz	P
	Low Level Signal Deviation	848 Hz < f <sub>dev</sub> ≤ 1037 Hz	P
2.2.16	Modulation Fidelity	≤ 5% (Class A)	P
2.2.18	Transient Frequency Behavior		
	Time Interval t <sub>1</sub> = 10 ms	Δf  ≤ 12.5 kHz	P
	Time Interval t <sub>2</sub> = 25 ms	Δf  ≤ 6.25 kHz	P
	Time Interval t <sub>3</sub> = 10 ms	Δf  ≤ 12.5 kHz	P

Project 25 Compliance Assessment Program  
Summary Test Report  
EF Johnson Viking VP900 UHF and 700/800 MHz Portable Subscriber Unit  
STR-EFJ-16022601  
February 26, 2016

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-16022601 DTR-P25CAP081010-16022602	
Trunked Subscriber Unit Tests (700/800 MHz)			
Test Case	Description	Requirement	Results
2.3.1	Trunking Control Channel Slot Times (45 ms slot) N7		
	Encode Attack Time	$2.00\text{ ms} \leq t \leq 11.65\text{ ms}$	P
	RF Power Attack Time	$0\text{ ms} \leq t \leq 11.65\text{ ms}$	P
	RF Power Turn Off Time	$\leq 1.57\text{ ms}$	P
2.3.2	Trunking Request Time	$\leq 167.5\text{ ms}$	P
2.3.3	Trunking Voice Access Time	500 ms (Manufacturer Specified)	P
2.3.5	Transmitter Time to Key on a Traffic Channel Short Channel Form	$\leq 150.0\text{ ms}$	P

Project 25 Compliance Assessment Program  
Summary Test Report  
EF Johnson Viking VP900 UHF and 700/800 MHz Portable Subscriber Unit  
STR-EFJ-16022601  
February 26, 2016

P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.1.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance		DTR-P25CAP081010-16022601 DTR-P25CAP081010-16022602	
Trunked Subscriber Unit Tests (UHF)			
Test Case	Description	Requirement	Results
2.3.1	Trunking Control Channel Slot Times (45 ms slot) N7		
	Encode Attack Time	$2.00\text{ ms} \leq t \leq 11.65\text{ ms}$	P
	RF Power Attack Time	$0\text{ ms} \leq t \leq 11.65\text{ ms}$	P
	RF Power Turn Off Time	$\leq 1.57\text{ ms}$	P
2.3.2	Trunking Request Time	$\leq 167.5\text{ ms}$	P
2.3.3	Trunking Voice Access Time	500 ms (Manufacturer Specified)	P
2.3.5	Transmitter Time to Key on a Traffic Channel Short Channel Form	$\leq 150.0\text{ ms}$	P

Project 25 Compliance Assessment Program  
Summary Test Report  
EF Johnson Viking VP900 UHF and 700/800 MHz Portable Subscriber Unit  
STR-EFJ-16022601  
February 26, 2016

<b>P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability</b>		DTR-TIMCO081016- VP600TN9400	DTR- P25CAP081010- 12100801	DTR- P25CAP081017- 1121211E01	DTR- P25CAP081010- 13020401	DTP- P25CAP081010- 14070301
<b>EF Johnson Viking VP900 Portable (See note N8)</b>		TN9400 TaitNet P25	EF Johnson IP25 Trunking Infrastructure	Harris Trunked Infrastructure	EF Johnson Atlas Trunked Infrastructure	Motorola Solutions ASTRO Trunked Infrastructure
<b>Test Case</b>	<b>Description</b>					
<b>2.2.1</b>	<b>Full Registration</b>					
<b>2.2.1.4.1</b>	Test Case 1 - Valid Registration					
	Home Operation	P	P	P	P	P
	Inter-System Operation	N3	N4	N5	N4	N6
	Inter-WACN Operation	N3	N4	N5	N4	N6
<b>2.2.1.4.2</b>	Test Case 2 – Denied or Refused					
	Home Operation	P	P	P	P	P
	Inter-System Operation	N3	N4	N5	N4	N6
	Inter-WACN Operation	N3	N4	N5	N4	N6
<b>2.2.1.4.3</b>	Test Case 3 - Unverified Registration					
	Home Operation	P	P	P	P	P
	Inter-System Operation	N3	N4	N5	N4	N6
	Inter-WACN Operation	N3	N4	N5	N4	N6
<b>2.2.2</b>	<b>Group Voice Call</b>					
<b>2.2.2.4.1</b>	Test Case 1 – Group Call Granted					
	Home Operation	P	P	P	P	P
	Inter-System Operation	N3	N4	N5	N4	N6
	Inter-WACN Operation	N3	N4	N5	N4	N6
<b>2.2.2.4.2</b>	Test Case 2 – Group Call Denied					
	Home Operation	P	P	P	P	P
	Inter-System Operation	N3	N4	N5	N4	N6
	Inter-WACN Operation	N3	N4	N5	N4	N6
<b>2.2.2.4.3</b>	Test Case 3 – Group Call Request					
	Home Operation	P	P	P	P	P
	Inter-System Operation	N3	N4	N5	N4	N6
	Inter-WACN Operation	N3	N4	N5	N4	N6

Project 25 Compliance Assessment Program  
Summary Test Report  
EF Johnson Viking VP900 UHF and 700/800 MHz Portable Subscriber Unit  
STR-EFJ-16022601  
February 26, 2016

<b>P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability</b>		DTR- P25CAP081016- VP600TN9400	DTR- P25CAP081010- 12100801	DTR- P25CAP081017- 1121211E01	DTR- P25CAP081010- 13020401	DTP- P25CAP081010- 14070301
<b>EF Johnson Viking VP900 Portable</b>		TN9400 TaitNet P25	EF Johnson IP25 Trunking Infrastructure	Harris Trunked Infrastructure	EF Johnson Atlas Trunked Infrastructure	Motorola Solutions ASTRO Trunked Infrastructure
<b>Test Case</b>	<b>Description</b>					
<b>2.2.3</b>	<b>Unit-To-Unit Voice Call</b>					
<b>2.2.3.4.1</b>	Test Case 1 – Unit-To-Unit Call With Target Availability Check					
	Home Operation	P	P	P	P	P
	Inter-System Operation	N3	N4	N5	N4	N6
	Inter-WACN Operation	N3	N4	N5	N4	N6
<b>2.2.3.4.2</b>	Test Case 2 – Unit-To-Unit Call Target Availability Check Denied By Target					
	Home Operation	P	P	P	P	P
	Inter-System Operation	N3	N4	N5	N4	N6
	Inter-WACN Operation	N3	N4	N5	N4	N6
<b>2.2.3.4.3</b>	Test Case 3 – Unit-To-Unit Call Queued With Target Availability Check – traffic channel assignment after target availability check					
	Home Operation	N/A 1	P	P	P	P
	Inter-System Operation	N3	N4	N5	N4	N6
	Inter-WACN Operation	N3	N4	N5	N4	N6
<b>2.2.3.4.4</b>	Test Case 4 – Unit-To-Unit Call Queued With Target Availability Check – traffic channel assignment before target availability check					
	Home Operation	P	N/A 2	N/A 2	N/A 2	N/A 2
	Inter-System Operation	N3	N4	N5	N4	N6
	Inter-WACN Operation	N3	N4	N5	N4	N6
<b>2.2.3.4.5</b>	Test Case 5 – Unit-To-Unit Call Without Target Availability Check					
	Home Operation	N2	N2	P	N2	N2
	Inter-System Operation	N3	N4	N5	N4	N6
	Inter-WACN Operation	N3	N4	N5	N4	N6



Project 25 Compliance Assessment Program  
 Summary Test Report  
 EF Johnson Viking VP900 UHF and 700/800 MHz Portable Subscriber Unit  
 STR-EFJ-16022601  
 February 26, 2016

<b>P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability</b>		DTR- P25CAP081016- VP600TN9400	DTR- P25CAP081010- 12100801	DTR- P25CAP081017- 1121211E01	DTR- P25CAP081010- 13020401	DTP- P25CAP081010- 14070301
<b>EF Johnson Viking VP900 Portable</b>		TN9400 TaitNet P25	EF Johnson IP25 Trunking Infrastructure	Harris Trunked Infrastructure	EF Johnson Atlas Trunked Infrastructure	Motorola Solutions ASTRO Trunked Infrastructure
<b>Test Case</b>	<b>Description</b>					
<b>2.2.3</b>	<b>Unit-To-Unit Voice Call</b>					
<b>2.2.3.4.6</b>	Test Case 6 – Unit-To-Unit Call Queued Without Target Availability Check					
	Home Operation	N2	N2	P	N2	N2
	Inter-System Operation	N3	N4	N5	N4	N6
	Inter-WACN Operation	N3	N4	N5	N4	N6
<b>2.2.3.4.7</b>	Test Case 7 – Unit-To-Unit Call Denied					
	Home Operation	P	P	P	P	P
	Inter-System Operation	N3	N4	N5	N4	N6
	Inter-WACN Operation	N3	N4	N5	N4	N6

Project 25 Compliance Assessment Program  
Summary Test Report  
EF Johnson Viking VP900 UHF and 700/800 MHz Portable Subscriber Unit  
STR-EFJ-16022601  
February 26, 2016

<b>P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability</b>		DTR- P25CAP081016- VP600TN9400	DTR- P25CAP081010- 12100801	DTR- P25CAP081017- 1121211E01	DTR- P25CAP081010- 13020401	DTP- P25CAP081010- 14070301
<b>EF Johnson Viking V900 Portable</b>		TN9400 TaitNet P25	EF Johnson IP25 Trunking Infrastructure	Harris Trunked Infrastructure	EF Johnson Atlas Trunked Infrastructure	Motorola Solutions ASTRO Trunked Infrastructure
<b>Test Case</b>	<b>Description</b>					
<b>2.2.4</b>	<b>Broadcast Voice Call</b>					
<b>2.2.4.4.1</b>	Test Case 1 – Broadcast Voice Call					
	Home Operation	P	P	P	P	P
	Inter-System Operation	N3	N4	N5	N4	N6
	Inter-WACN Operation	N3	N4	N5	N4	N6
<b>2.2.5</b>	<b>Affiliation</b>					
<b>2.2.5.4.1</b>	<i>Test Case 1 - Radio Permitted To Affiliate With New Group</i>					
	Home Operation	P	P	P	P	P
	Inter-System Operation	N3	N4	N5	N4	N6
	Inter-WACN Operation	N3	N4	N5	N4	N6
<b>2.2.5.4.2</b>	Test Case 2 - Radio Denied Affiliation To New Group					
	Home Operation	P	P	P	P	P
	Inter-System Operation	N3	N4	N5	N4	N6
	Inter-WACN Operation	N3	N4	N5	N4	N6
<b>2.2.6</b>	<b>Announcement Group Call</b>					
<b>2.2.6.4.1</b>	Test Case 1 - Collection Of Talk Groups Receive Call					
	Home Operation	P	P	P	P	P
	Inter-System Operation	N3	N4	N5	N4	N6
	Inter-WACN Operation	N3	N4	N5	N4	N6
<b>2.2.7</b>	<b>Emergency Alarm</b>					
<b>2.2.7.4.1</b>	Test Case 1 - Emergency Alarm					
	Home Operation	P	P	P	P	P
	Inter-System Operation	N3	N4	N5	N4	N6
	Inter-WACN Operation	N3	N4	N5	N4	N6

Project 25 Compliance Assessment Program  
 Summary Test Report  
 EF Johnson Viking VP900 UHF and 700/800 MHz Portable Subscriber Unit  
 STR-EFJ-16022601  
 February 26, 2016

<b>P25-CAB-CAI_TEST_REQ – March 2010, Section 2.1.3.2 – Project 25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability</b>		DTR- P25CAP081016- VP600TN9400	DTR- P25CAP081010- 12100801	DTR- P25CAP081017- 1121211E01	DTR- P25CAP081010- 13020401	DTP- P25CAP081010- 14070301
<b>EF Johnson Viking VP900 Portable</b>		TN9400 TaitNet P25	EF Johnson IP25 Trunking Infrastructure	Harris Trunked Infrastructure	EF Johnson Atlas Trunked Infrastructure	Motorola Solutions ASTRO Trunked Infrastructure
<b>Test Case</b>	<b>Description</b>					
<b>2.2.8</b>	<b>Emergency Group Call</b>					
<b>2.2.8.4.1</b>	Test Case 1 - Emergency Call					
	Home Operation	P	P	P	P	P
	Inter-System Operation	N3	N4	N5	N4	N6
	Inter-WACN Operation	N3	N4	N5	N4	N6
<b>2.2.10</b>	<b>Encryption</b>					
<b>2.2.10.4.1</b>	Test Case 1 - Call Privacy For Encrypted Call					
	Home Operation	P	P	P	P	P
	Inter-System Operation	N3	N4	N5	N4	N6
	Inter-WACN Operation	N3	N4	N5	N4	N6
<b>2.2.11</b>	<b>Intra-Location Registration Area Roaming</b>					
<b>2.2.11.4.1</b>	Test Case 1 – Idle Radio					
	Home Operation	P	P	P	P	P
	Inter-System Operation	N3	N4	N5	N4	N6
	Inter-WACN Operation	N3	N4	N5	N4	N6

Project 25 Compliance Assessment Program  
Summary Test Report  
EF Johnson Viking VP900 UHF and 700/800 MHz Portable Subscriber Unit  
STR-EFJ-16022601  
February 26, 2016

Model Class Definition		Applied to P25-CAB-CAI_Test_Req Mar 2010, 2.1.3.2
Model Class Name	Product Name, Definition, and Unique ID	Installed Options
Viking VP900 Series Portable	Viking VP900 Portable	<b>Firmware:</b> 8.7.10

Test Case Result Definitions	
No Test Performed	---
Test Does Not Apply to the Test Object	N/A
Test Object Meets Requirements	P (Pass)
Test Object Does Not Meet Requirements	F (Fail)
Test Object is Not Conclusive	I (Inconclusive)

Project 25 Compliance Assessment Program  
Summary Test Report  
EF Johnson Viking VP900 UHF and 700/800 MHz Portable Subscriber Unit  
STR-EFJ-16022601  
February 26, 2016

Comments
N/A 1: Test case 2.2.3.4.3 is not applicable for TN9400 Taitnet P25 Infrastructure; see results of test case 2.2.3.4.4.
N/A 2: Test case 2.2.3.4.4 is not applicable for these infrastructures; see results of test 2.2.3.4.3.
N1: EF Johnson VP600/VP900 subscriber does not support these features.
N2: Infrastructure does not support this mode of operation.
N3: TN9400 TaitNet P25 and EF Johnson Viking VP600/VP900 subscriber do not support these features.
N4: EF Johnson trunking system release 3.1-RC1, EF Johnson Atlas TSNI 1.0.5-1, and EF Johnson Viking VP600/VP900 subscriber do not support these features.
N5: Harris infrastructure release PR9D and EF Johnson Viking VP600/VP900 subscriber do not support these features.
N6: Motorola infrastructure release 25 and EF Johnson Viking VP600/VP900 subscriber do not support these features.
N7: VP900 meets timing requirements in the 45 ms slot timing mode.
N8: EF Johnson VP400, VP600, and VP900 series portables utilize common trunking software across all frequency bands. Leveraging this frequency band independence of the trunking software, EF Johnson defines a common model class for VP series portables as encompassing all frequency bands for the purposes of trunking interoperability.
P1: EF Johnson Viking VP900 700/800 MHz subscriber passes Reference Sensitivity ( $\leq -116$ dBm) specification for C4FM (Non-Simulcast) and Simulcast modulations.
P2: EF Johnson Viking VP900 700/800 MHz subscriber passes Faded Reference Sensitivity ( $\leq -108$ dBm) specification for C4FM (Non-Simulcast) and Simulcast modulations.
P3: EF Johnson Viking VP900 700/800 MHz subscriber passes Signal Delay Spread Capability specification for C4FM (Non-Simulcast) ( $\geq 50$ $\mu$ s) and Simulcast modulations ( $\geq 80$ $\mu$ s).
P4: EF Johnson Viking VP900 700/800 MHz subscriber passes Adjacent Channel Rejection ( $\geq 60$ dB) specification for C4FM (Non-Simulcast) and Simulcast modulations.
P5: EF Johnson Viking VP900 UHF subscriber passes Reference Sensitivity ( $\leq -116$ dBm) specification for C4FM (Non-Simulcast) and Simulcast modulations.
P6: EF Johnson Viking VP900 UHF subscriber passes Faded Reference Sensitivity ( $\leq -108$ dBm) specification for C4FM (Non-Simulcast) and Simulcast modulations.
P7: EF Johnson Viking VP900 UHF subscriber passes Signal Delay Spread Capability specification for C4FM (Non-Simulcast) ( $\geq 50$ $\mu$ s) and Simulcast modulations ( $\geq 80$ $\mu$ s).
P8: EF Johnson Viking VP900 UHF subscriber passes Adjacent Channel Rejection ( $\geq 60$ dB) specification for C4FM (Non-Simulcast) and Simulcast modulations.

Project 25 Compliance Assessment Program  
Summary Test Report  
EF Johnson Viking VP900 UHF and 700/800 MHz Portable Subscriber Unit  
STR-EFJ-16022601  
February 26, 2016

The information contained herein has been provided by the manufacturer of the product with permission to make the information publicly available. The Department of Homeland Security (DHS) is making this information available as a public service; however, DHS IS PROVIDING THE INFORMATION "AS IS". DHS MAKES NO EXPRESS OR IMPLIED WARRANTIES AND SPECIFICALLY, DHS MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, REGARDING THE ACCURACY OR USE OF THIS INFORMATION. Reference to any specific commercial products, processes, or services by trade name, trademark, manufacturer, or otherwise does not constitute an endorsement by or recommendation from DHS.

**OMB NO:** 1640-0015

**EXPIRATION DATE:** 07/31/2015      New OMB Date: 04/30/2016 - KRT for DHS OIC

**Burden Statement**

An agency may not consider or sponsor information collection and a person is not required to respond to this information collection unless it displays a current valid Office of Management and Budget control number and expiration date. The control number for this collection is 1640-0015 and this form will expire on 07/31/2015. The estimated average time to complete this form is 60 minutes per respondent. If you have any comments regarding the burden estimate you can write to Department of Homeland Security, Science and Technology Directorate, Washington, DC 20528.

DHS FORM 10056 – June 2009